

Claims

1-8 Canceled

9. (New) A method for operating an electromechanically operable parking brake for motor vehicles having an operating element (7), an electronic control unit (6) which receives wheel speed values from wheel speed sensors (12, 13), at least one unit (1) for generating a brake application force, and electromechanically lockable brake devices (4) on at least one axle, with said brake devices (4) being adapted to be applied by the unit (1), the method comprising:

activating a parking brake;

driving the parking brake in a first operating mode when there are no wheel speed values; and

driving the parking brake in a second operating mode when wheel speed values are present.
10. (New) The method according to claim 9, wherein the parking brake is driven in a first operating mode if it has been detected already in the previous operating interval that wheel speed values are missing.
11. (New) The method according to claim 10, wherein the parking brake is driven in a first operating mode if the operator does not assign the second operating mode to the parking brake.
12. (New) The method according to claim 10, wherein the parking brake is driven in a second operating mode when the operator switches off the ignition and actuates the operating element (7) for a time longer than a predetermined time.

13. (New) The method according to claim 10, wherein the parking brake is driven in a second operating mode when the operator switches off the ignition and removes the ignition key from the ignition lock (27) at least for a predetermined time.
14. (New) The method according to claim 10, wherein the brake application force of the parking brake in the first operating mode is developed and maintained exclusively during the actuation of the operating element (7), and in that a maximum admissible force is applied to the parking brake in the second operating mode upon actuation of the operating element (7), and release thereof is possible only by means of a new actuation of the operating element (7), with the ignition switched on.
15. (New) An electromechanically operable parking brake for motor vehicles having an operating element (7), an electronic control unit (6) which receives wheel speed values from wheel speed sensors (12, 13), at least one unit (1) for generating a brake application force and electromechanically lockable brake devices (4) on at least one axle, with said brake devices (4) being adapted to be applied by the unit (1), the parking brake comprising:

a driver for driving the parking brake, after activation, in a first operating mode when wheel speed values are missing, if the brake devices (4) are not applied, while the parking brake is driven in a second operating mode in a contrary case.
16. (New) The parking brake according to claim 15, wherein a warning lamp (17) is provided to indicate to an operator whether the parking brake is driven in the first or the second operating mode.